sides, the solar dials could be used to obtain the hour during the night by the shadow of the moon; and indeed the time at night could be obtained by observation of the fixed stars. The same table contains the value of the equation of clocks and pendulums, what we now call the "equation of time." 5. A summary of the movements of all the planets for the year, containing little but an indication of the epochs when they were visible and of the constellations through which they passed. 6. A plate in which the preceding data were graphically traced. 7. A table of the latitudes and longitudes (adjusted to the meridian of Paris) of the principal cities of France. 8. An appendix, relating to physical questions, containing an account of the winds which prevailed in Paris for every day of the preceding year, and an exact account of barometric indications for the same period.

In 1680, Picard completed his volume by the following additions:—A note on the inquiry into longitudes (*recherches des longitudes*) by means of clocks and pendulums; a table of lengths of the pendulum corresponding to an increasing number of vibrations per second, and intended for the regulation of clocks; a table of declinations of the sun for each day (by degrees and minutes); and lastly, a table indicating the weights of the unit of volume (a cubic foot) of different substances.

These Ephemerides, although less complete, so far as pure astronomy is concerned, than those of Hecker, were, however, superior to them from a practical point of view, by the substitution of the right ascension of the sun and moon for the longitude and latitude of these bodies; it is, in fact, the right ascension and declination which are directly useful to astronomers.

Picard, who published the "Connaissance des Temps" at his own expense and his own risk, was naturally interested in the success of his work. Thus, after having sought to satisfy the wants of astronomers and mariners, he added to this publication a list of the days on which the posts to the various towns of France set out from Paris. The custom of adding to the astronomical tables physical or statistical data altogether foreign to astronomy, has been continued to the present time in the "Annuaire du Bureau des Longitudes."

Still the great labour required in editing these Ephemerides soon tired the Abbé Picard, who tried to find a successor. There was then at the college of Lisieux, at Paris, a professor of rhetoric named Pierre, who was a good astronomer, and on that account was intimate with all the astronomers of his time. The learned Abbé asked him one day if he knew any one capable of assisting him, and afterwards of carrying on the "Connaissance des Temps;" Pierre proposed Jean Lefebvre, weaver at Lisieux, who, in the intervals of leisure which his work allowed him, amused himself by reading some books on astronomy, and was familiar enough with that science to be known to Pierre, originally of the same town: he had sent the latter, among other things, calculations of eclipses which quite agreed with observation. Pierre and Picard then asked Lefebvre to calculate a table of the passage of the moon across the meridian, and this having been accurately performed, they offered him an academician's annuity to come to Paris and continue the "Connaissance des Temps." We owe to his calculations the volumes from 1684 to 1702. Profiting by the new tables of the equation of the sun of Picard and Cassini, he was able to calculate the "Connaissance des Temps" with more accuracy than had ever been done before.

To Lefebvre also are due several additions and modifications. Thus in 1686 he added a table of the exact positions of the planets, the sun, and the moon for every ten days; in 1690 he gave the immersions and emergences of the first satellite of Jupiter; in 1691 maxims in reference to the movement of a ship, a list of ports and coasts, &c. In 1692 he added a table of refractions from 0° to 90° of apparent height, calculated to a minute up to 48° and to a second from 48° to 90°, as well as a value of the declination of the needle according to the observation of La Hire.

In 1693 Lefebvre, having left Paris to take part in the geodetic operations of Picard, one of his colleagues of the Academy, Lieutaud, edited the *Connaissance des Temps* in 1693 and 1694; but on his return he resumed the editorship, and continued it without interruption till 1702.

At that time, in consequence of an incident curious enough to bear relation, the publication of the *Connaissance des Temps* was taken up by the Academy of Sciences.

The son of De la Hire, a very popular academician, who had considerable influence among his colleagues, published, for 1701, a collection of Ephemerides intended to rival those of Lefebvre, in which he said, "I hope, at least, that there will not be found here errors (*éloignements*) of calculation so great as are seen in certain popular and much praised Ephemerides," &c. Wounded to the quick by such a reproach, altogether untrue, Lefebvre wrote in the preface of the *Connaissance*, for 1701, "I cannot avoid replying to the invectives of a certain small novice [De la Hire *fils*], supposed author of an annual Ephemerides published a short time ago. This new author, filled with a spirit of vanity, presumption, and falsehood . . . We reply to this youthful novice . . ."

De la Hire, himself, was not spared. At this uncouth reply the enemy's camp winced, and resolved on revenge; success was easy, for Lefebvre was by no means a general favourite. Little by little the meetings of the Academy were rendered insupportable to him, and when he had absented himself for a certain number of meetings, his name was struck out of the lists of that body. Deprived of his Academician's pension, Lefebvre could no longer continue the *Connaissance des Temps.* The Academy then took possession of the publication, which became a public undertaking; so that the volume of 1702, instead of being, like the previous ones, dedicated to the king, is published "by order of the Academy of Sciences." The old title is changed, and it is simply called "Connaissance des Temps, pour le Méridien de Paris."

(*To be continued.*)

NOTES

In reference to the meeting of the British Association at Bradford, the Reception Room will be opened on Monday, September 15, at 1 P.M., and on the following days at 8 A.M., for the issue of tickets to members, associates, and ladies, and for supplying lists and prices of lodgings, and other information, to strangers on their arrival. No tickets will be issued after 6 P.M. On and after Monday, September 15, members, and persons desirous of becoming members or associates, or of obtaining ladies' tickets, are requested to make application in this room. In the Reception Room there will be offices for supplying information regarding the proceedings of the meeting. The "Journal," containing announcements of the arrangements for each day, will be laid on the table on Wednesday, September 17, and the following mornings, at 8 A.M., for gratuitous distribution. Lists of members present will be issued as soon as possible after the meeting, and will be placed in the same room for distribution. The first general meeting will be held on Wednesday, September 17, at 8 P.M. precisely, when Dr. Carpenter, LL.D., F.R.S., &c., will resign the chair, and the President Elect will assume the presidency, and deliver an address. On Thursday evening, September 18, at 8 P.M., a Soirée; on Friday evening, September 19, at 8 30 P.M., a Discourse; on Monday evening, September 22, at 8.30 P.M., a Discourse; on Tuesday evening, September 23, at 8 P.M., a Soirée;

on Wednesday, September 24, the concluding General Meeting will be held at 2.30 P.M. We omitted to mention in last week's number that the President of Section D, Biology, is Prof. Allmann, M.D., F.R.S.

SIR HENRY RAWLINSON has received a letter dated Khartoom, July 2, from Sir Samuel Baker. Sir Samuel expresses a hope that he will be in England in September. In reference to the oneness of Lakes Tanganyika and Albert Nyanza, he says:—"The envoys sent by M'tése all assured me that the Tanganyika is the M'wootan N'zizé (Albert Nyanza) and that Ujiji is on the eastern border; that you can travel by boat from Ujiji to the north end of the Albert Lake; but you must have a guide, as some portions are very narrow and intricate. From my experience of the high-water grass, I should expect islands and floating vegetation in the narrow passes described. I am by no means fond of geographical theories, but the natives' descriptions were so clear that I accepted as a fact that the Tanganyika and Albert Lakes are one sheet of water, with marshy narrow straits overgrown with water grass, through which you require a guide."

THE Session of the British Medical Association in London during the last week seems in all respects to have been most successful: a great many papers were read, and a great quantity of pleasuring hurried through. Many of the papers were valuable from a medical point of view, and some of importance even from a general scientific standpoint. This week we give a short abstract of Dr. Sanderson's address.

AT the annual general meeting of the Royal Botanical Society, on Monday, the Council congratulated the Fellows on the fact that since the last anniversary meeting the progress which had characterised the operations of the society during the last few years had been maintained. The number of new Fellows elected during the year was 114, being an increase of ten above that of last year; few resignations had occurred. The total number of Fellows and members at the present time was 2,502, the largest on the books of the society since its commencement. The total amount received in subscriptions was 250*l.* in excess of that of last year, and considerably above the average of the last few seasons. From the auditor's report it appeared that the total receipts for the year, including the balance of 529*l.* from the previous year, amounted to 13,434*l.* 6*s.* 11*d.*, and the payments, exclusive of the balance in hand, 2,170*l.* 9*s.* 4*d.*, to 11,263*l.* 17*s.* 7*d.* The report of the secretary was also read, and was equally satisfactory with the other reports. The Council for the next year was elected by ballot.

PROF. G. SCHWEIZER, Director of the Moscow Observatory, died on July 5, after a long illness.

THE death of Sir Francis Ronalds in his 86th year, at Battle, in Sussex, has just been announced. Sir Francis was well known, many years ago, for his experiments in electricity. In 1823 he published a pamphlet containing an account of some of his experiments, and explaining, with the help of illustrations, his plan of an electric telegraph. He had erected in his own garden, first at Highbury and then at Hammersmith, a number of poles supporting eight miles of wire, and through this wire he sent his messages. Each message was read at the further end by means of two needles moving on a dial plate, a plan much the same as that which afterwards came into general use. The spark in his telegraph system was however created by an electrical machine, and not, as in existing systems, by a galvanic battery. In recognition of the value of his discovery, the Government bestowed on him the honour of knighthood in 1870, when the same mark of appreciation had been conferred on Sir Charles Wheatstone for his improvement of the telegraph. Sir F. Ronalds superintended for a short time the Meteorological Observatory at Kew on behalf of the British Association, and the Government conferred upon him a small pension for his services to Science. For some years he lived in the north of Italy, studying the works of Italian writers on electricity. Lately he was engaged in his home at Battle in preparing a catalogue of the published books and papers on electrical science, which we believe is quite ready for print, and will be of great value to students.

To the notice which appeared some few weeks back stating that the large female Octopus had deposited a quantity of spawn on the rock-work of her tank, we have now to add the still more interesting intelligence of the successful development and escape of the perfected embryos. It will be remembered that the first of these eggs were deposited on June 19, and as the earliest arrivals of the young Octopods into the outer waters of their tanks took place on Friday the 8th inst., we have just eight weeks as the period of incubation. Mr. Saville Kent, having personally witnessed the congress of the two sexes in April last, we are also in a position to record an almost similar period occupied during the process of gestation, and which together constitute an important addition to our previous knowledge of the habits of the Cephalopoda. Since Mr. Saville Kent's resignation of the Curatorship, the Brighton Aquarium has unfortunately lost the older and tamer example of the two porpoises, commented upon by that gentleman in NATURE for July 17, as also the unique specimens of the Sturgeon and John Dorée, which have likewise received a share of attention from the same pen in the pages of this journal.

THE Lords of the Committee of Council on Education are about to appoint a keeper of the Natural History Department of the Edinburgh Museum of Science and Art. The salary will be 350*l.*, rising to 450*l.* per annum. Candidates should apply to the Secretary, Science and Art Department, South Kensington.

THE German African Exploration Society has received a despatch, dated July 1, announcing the arrival of Professors Bastian and Goeschen at Cabinna Clougd, for which place Dr. Guesfeldt had started on June 28 from Sierra Leone. Dr. Falkenstein, Dr. Anatoin, physician, and Herr Linder, engineer, are hourly awaiting, at Berlin, further intelligence, on receipt of which they leave to join the expedition.

Xanthorrœa australis, one of the grass gum trees of Australia, is coming into flower for the first time in Europe, in the succulent-house at Kew. There is also a fine plant of *Agave jacquiniana*, removed to the palm-house for the sake of space, which is now in full flower.

DR. PETERMANN has sent us advanced sheets of some of the articles to appear in the forthcoming number of his *Mittheilungen*. One of these gives an account of the *Polaris* Arctic Expedition under the unfortunate Capt. Hall, and points out the main scientific results, which Dr. Petermann rightly regards as of the highest importance. He animadverts with considerable severity on the conduct of the English for the last nine years with regard to Arctic exploration; we, he says, having during that time endeavoured to depreciate the efforts of others, while we ourselves have done nothing. Even the expedition of the daring Hall, he declares, we sneered at when it set out, and since its fate was known, have spoken slightingly of the results. We must acknowledge that Dr. Petermann's taunt as to our inaction during the last nine years in the direction of Arctic exploration is to some extent justified by facts; that inaction, however, is not due to the apathy of English men of Science but to the parsimony of the British Government. We have done much in the way of private effort for discovery, but no amount of private effort is equal to the fitting out of an adequate Polar Expedition. It is, we believe, the earnest desire of all classes that Government should provide the means of enabling this country to take that foremost part in Arctic exploration which was formerly hers without dispute, by fitting out a thoroughly equipped expedition, an expedition which should have for one of its aims the finding of the Pole. As to Captain Hall's expedition, so far as we are aware, the high value of its results has been everywhere in this country gratefully acknowledged, as well as the indomitable bravery and enthusiasm and high intelligence of the leader; one of its most important results, for which all men of Science must be thankful, is that it has left the most practicable path to the Pole no longer questionable. That the *Polaris*, however, was ill suited for ice-navigation, and that there was a want of that thorough discipline on board, without which no expedition of the kind can hope to be perfectly successful, we still maintain is borne out by what was elicited during the official investigation. We sincerely hope with Dr. Petermann that the magnanimity and liberality of the American Government will be the means of putting an end to the "mere talk of Englishmen," and of inducing our Government at last to set about organising on the most liberal scale an expedition to leave our shores in the spring of 1874. Other papers in the forthcoming number are "With the Russian Army against Khiva," being two letters to Dr. Petermann from Lieut. Hugo Stumm, of the Westphalian Hussar Regiment, and a paper by Dr. D. Sievers, dated Tiflis, May 7, full of geographical information of great importance. The same number will contain the conclusion of Baron von Richthofen's account of his travels from Pekin to Sz'-tshwan.

THE last issued number (vii.) of Petermann's *Mittheilungen* contains the conclusion of Ernest Marno's Travels in High Sennaar; the Results of the Observations made during the voyage of the *Albert* in November and December last, by Prof. Mohn, Director of the Norwegian Meteorological Institute; and a well-constructed map of the Chinese Province of Kuang Tung, from native and foreign authorities, by Dr. Hirth, with accompanying description.

PROF. AGASSIZ, in his address to the students, at the opening of the American School of Natural History, on Penikese Island, said:—"Our chief work will be to watch the aquarium. I want you to study principally marine animals. The only way to do that properly, is to have them alive by your side. In a very few days I shall place at your disposal a series of these appliances. I have ordered one for every person admitted to the school, so that each of you will have means to make these investigations. I have never had, in my own laboratory, better opportunities for work than I place at your disposal. Our way of studying will be somewhat different from the instruction generally given in schools. I want to make it so very different, that it may appear that there is something left to be done in the system adopted in our public schools. I think that pupils are made too much to turn their attention to books, and the teacher is left a simple machine of study. That should be done away with among us. I shall never make you repeat what you have been told, but constantly ask you what you have seen yourselves." The following men of science will, it is said, assist Prof. Agassiz in the conduct of his new charge:—Dr. Burt G. Wilder, of Cornell; Dr. A. S. Packard, of Peabody Academy of Science, Salem; Count Pourtales, of the Coast Survey; Prof. Waterhouse Hawkins, of England; Paulus Roetter, artist of the Museum at Cambridge; Prof. Mitchell, of the Coast Survey; Prof. Joseph S. Lovering, of Harvard University; Prof. F. W. Putnam, of Peabody Academy of Science, Salem; Prof. N. S. Shaler, of Harvard; Prof. Arnold Guyot, of Princeton, N. J.; Prof. Brown-Séquard.

ACCORDING to the *Melbourne Argus*, H.M.S. *Basilisk*, Capt. Moresby, while cruising in Torres Straits and neighbourhood for the suppression of the Polynesian labour traffic, has added a valuable fact to the knowledge we possessed of the geography of New Guinea by the discovery of a new port and harbour in lat. 9° 30′ S., lon. 147° 10′ E., about 38 miles east of Redscar Bay, on the south-eastern coast. The discovery was made in February, when Captain Moresby, while searching for a river supposed to flow into the sea east of Redscar Bay, entered an inlet which proved to be the entrance to a magnificent harbour, with an outer and inner anchorage, to which the names of Port Moresby and Fairfax Harbour have been given. The natives are much lighter complexioned than those of the opposite coast, and are evidently of a much more friendly disposition.

A GREAT earthquake occurred at Valparaiso early on the morning of July 8. There were six shocks in succession. Many families took refuge in the streets, the damage to private houses as well as to the public buildings being considerable; and many deaths were reported. A statue lately erected to Lord Cochrane was wheeled half round on its pedestal. The earthquake was observed to come from the east, and was felt as far south as Curico.

THE *Telegraphic Journal* intends to offer to its students from time to time prizes for the best and most carefully considered paper on a given subject. The first of these students' prizes is one of 25*l.* to be awarded to the author of the best paper on "The Evidence of the Theory of Correlation of Physical Forces as applied to Electricity and Magnetism," received by the editor of the journal on or before January 1st, 1874. The funds for this prize have been kindly given by Mr. Edward Sabine, C.E. The prize paper will be printed in the columns of the *Telegraphic Journal.*

WE understand that 1,000*l.* has been generously presented to the Oldham School of Science and Art, by Mrs. Platt, widow of the late John Platt, M.P., who was its founder in 1865, and life-president. Since the opening, its artisan students have gained four Whitworth Scholarships of 100*l.* each for three years (two have been awarded this year); two Whitworth Fellowships of 25*l.* each; one Studentship at the Royal School of Mines; three gold, six silver, and five bronze Queen's Medals (the Medallists of 1873 are not yet announced). Twenty-four artisan students were examined by the Department last May, in Inorganic Chemistry—eighteen passed (nine first class, nine second class)—and twelve in Laboratory Practice. The Committee have granted funds to enlarge the Chemical Laboratory, also to establish one for practical work in Heat, Steam, Light, and Acoustics. Mr. J. T. Hibbert, M.P. for Oldham, has given a Local Scholarship of 25*l.* for the coming session. We have received a well-arranged time-table of Classes under the direction of Mr. Phythian, C.E., and Mr. Philip, M.A.

IN accordance with the resolution passed at the meeting, noted in last week's NATURE, for the promotion of technical education, at which H.R.H. the Prince of Wales presided, the Haberdasher's Company have sent to Lord Lawrence, for distribution by the London School Board, the sum of 20*l.* as their contribution towards the purchase of tickets of admission to the International Exhibition.

DURING the month of October, we learn from the *Journal of the Society of Arts*, notwithstanding the Anarchical State of Spain, an exhibition is to be held at Madrid, of national products and manufactures, of agriculture, mines, chemicals, industries, and graphic arts. Foreign products will be received by the executive at Madrid if carriage paid. Goods will be sold by the executive on a small commission charge. This is to be the first of a proposed series of Spanish exhibitions.

PROF. COPE sends us, as No. 14 of his "Palæontological Bulletins," the description of two new mammals from the tertiary "of the plains." One, *Aelurodon mustelinus*, is only known from some teeth of the molar series; the other, *Aceraherium megalodus*, is represented by a perfect cranium with dentition of both jaws nearly complete, with other bones of other specimens. The wording of the description is intricate and short.

A PAPER entitled "A Study of North American Noctuidæ, by A. R. Grote, was read on July 2 before the Buffalo Society of Natural Sciences, declaring that six new genera (Ufeus, Ablepharon, Ommatostola, Argillophora, Harveya, Spiloloma) and twenty-seven hitherto undescribed species (Agrotis, 7; Ufeus, 2; Mamestia, 1; Dianthœcia, 1; Oncocnemis, 3; Hadena, 1; Ommatostola, 1; Cucullia, 1; Xylina, 1; Heliothis, 6; Argillophora, 1; Harveya, 1; Spiloloma, 1), occur in the N. American Insect Fauna.

SIR HENRY RAWLINSON'S presidential address at the last anniversary meeting of the Geographical Society has been published in a separate form by Messrs. Clowes and Sons. We are glad to see it reproduced in a handy and well-printed form, for it contains a masterly summary of the progress of geographical knowledge during the past year.

WE have received the prospectus of what promises to be a handsome and valuable work, "The Fenland, Past and Present: its History, Geography, Geology, Natural History, Scenery, Antiquities, Climatology, Drainage, Agricultural Produce, and Sanitary Condition; illustrated with Wood Engravings, Maps, and Diagrams; by Samuel H. Miller, F.R.A.S., Fellow of the Meteorological Society; and Sydney B. J. Skertchley, F.G.S., H.M. Geological Survey." It will be published by Leach and Son, Wisbech; and Longmans, Green, and Co. London. Under the head "Fenland," the authors include that area of low, once marshy lands, in which the rivers Witham, Welland, Nene, and Ouse interlaced, including nearly 2,000 square miles, and roughly bounded by a line drawn from Lincoln by Bourn and Peterborough to Cambridge on the west; from Lincoln to Skegness on the north; from Cambridge and St. Ives to Brandon on the south; and from Brandon to Lynn on the east (thus including Boston, Sleaford, Spalding, Croyland, Thorney, Wisbech, March, Huntingdon, Ely, besides the border towns.)

A VERY deserving institution has recently been established in Cincinnati, under the title of the Cincinnati Acclimatisation Society, its object being to effect the introduction of such foreign birds as are worthy of note for their song or their services to the farmer or horticulturist. The society announces that during last spring it expended 5,000 dols. in introducing fifteen additional species of birds, and that it had already successfully accomplished the acclimatisation of the European sky-lark, which is stated to be now a prominent feature of the summer landscape in the vicinity of Cincinnati. Among the species which it is proposed to introduce is the European titmouse, considered abroad as one of the most successful foes of insects injurous to vegetation.

THE addditions to the Zoological Society's Gardens during the past week include a Harnessed Antelope (*Tragelaphus scriptus*), a Double-crested Pigeon (*Lopholæmus antarticus*), two Senegal Touracous (*Corythaix persa*), two Chilian Tinamous (*Rhynchotus perdicarius*), a White-fronted Dove (*Leptoptila jamaicensis*), a Glossy Ibis (*Ibis falcinellus*), a Mauge's Dasyure (*Dasyurus maugæi*), a Barbary Ape (*Macacus inuus*), and others.

SCIENTIFIC SERIALS

Annalen der Chemie und Pharmacie Neue Riehe, Band xci. Heft 2 und 3, June 14. This number begins with communication No. 83 from the Griefswald Laboratory, the subject of which is Phenathren, by M. Hayduck. The author describes several of the compounds of this body.—From the same laboratory we have a notice on the compound $C_{14}H_8S_2$, by C. Pauly.—B. Rathke contributes a paper on the chloro-sulphides of carbon, and another on the compounds of the amides with that body. One of these chloro-sulphides has the formula $CSCl_4$—perchloromethylmercaptan, another the formula $CSCl_2$, several of their compounds are described. The same author also contributes a short paper on the changes nitro-compounds undergo in sulpho-acids.—Messrs. Maunder and Tollens communicate a paper on β Bibromopropionic acid, in which they give an exhaustive account of this body and its compounds.—Messrs. Caspary and Tollens have converted β Bibromopropionic acid into acrylic acid and give an account of the process, and of the salts of acrylic acid.—Mr. B. Tollens communicates a paper on the constitution of the allyl and acryl derivatives.—Prof. Max. von Pettenkofer has a paper on "Nourishment in general, and on flesh extract as an essential portion of human nutriment in particular."—Messrs. Lieben and Paterné have a paper on the dry distillation of calcic formate.—J. Wislicenus communicates a paper on the optically active lactic acid of flesh extract, and on paralactic acid. The same author also communicates some observations on ethyllactic acid. The next paper is by C. E. Groves on the formation of naphthaquinone by the direct oxidation of naphthalene, which has already appeared in the March number of the Chemical Society's Journal. Messrs. Hlasiwetz and Kachler, in a postscript to their paper on a new derivative of sulpho-carbaminic acid, mention the discovery of the body in question by Zeise in 1842. H. Ranke finishes the number with some experimental proofs of the possibility of the spontaneous combustion of hay.

Reale Instituto Lombardo di Scienze e Lettere Rendiconti, serie ii. vol. vi. Fascicoli x.—We notice papers on *Felobates fuscus*, by Prof. Emelio Cornalia; on the Italian earthquake of March 12, by A. Serpieri; on some geological theories, by G. Cantoni; on the inversion of currents in electromotors, by A. Ferrini. Besides these there are papers on Manzoni and on Kant's philosophy, the first by A. Buccellati, and the second by C. Cantoni. Fascicolo XI. contains only social papers, none of scientific interest. In Fascicolo XII., S. A. Lemoigne contributes a paper on the mechanism of rumination, and J. A. Serpieri one on the earthquake of March 12; S. A. Cantoni has a paper on the molecular movements of gases. The rest of the number is devoted to the section of moral and political science.

IN the *Annali de Chimica applicata alla Medicina* for June is a paper on the cremation of the dead, which practice is strongly advocated. The author, who is anonymous, states that in Belgium 7,500 hectares (1 hectare = 2·47 acres) are unproductive of food, through being used as cemeteries. He estimates the value of this land at from 38 to 40 millions (lire?).

SOCIETIES AND ACADEMIES

LONDON

Royal Horticultural Society, July 16.—Scientific Committee.—Dr. M. T. Masters, F.R.S., in the chair.—A letter was read from the locomotive superintendent of the Brighton Railway stating the results of the company's experience in using a mixture of chalk with coal for fuel. It was found that used for any other purpose than that of saving the fire-bars from Welsh coal (for which it is admirably suited) or for reducing the area of heating surface it increases the ordinary consumption of fuel considerably.—The Rev. M. J. Berkeley showed female flowers of *Lychnis diurna*, in which the calyx was reduced by arrest of development to a mere rim.

August 6.—General Meeting.—W. B. Kellock in the chair.—The Rev. M. J. Berkeley commented upon the fruits and vegetables exhibited. He mentioned the remarkable improvement in the quality of W. Indian pines owing to the introduction from England of the better cultivated kinds.—Prof. Thiselton Dyer pointed out that a curious cucurbit which had lately been introduced, rather as a curiosity than for any useful purpose, under the name of Sooly Qua, was a form of *Luffa ægyptiaca*, the common washing gourd. Another cucurbit known as the Toong Qua appeared to be identical with *Benincasa cerifera*.—A new method of propagating ipecacuanha had been devised in India by Mr. Jaffray, and promised to be of great importance. It simply consisted in striking the leaves upright in pots. These produced roots and the most superficial of these eventually produced buds.—As an interesting fact bearing upon the distribution of plants, an extract of a letter from Mr. Moseley, naturalist on board H.M.S. *Challenger*, was read. A vessel laden with grapes was wrecked on the coast of Bermuda a short time ago.